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ABSTRACT

Advantages and disadvantages of film as a communications medium are examined and discussed. Advantages are said to be that it appeals to several senses, is a mass medium, makes for a captive and passive audience and one which is visually oriented, arouses empathy and can take audiences to remote locations and other times. Disadvantages are that it is transitory, inflexible, often presents an alien perspective, is structured linearly, is expensive and is limited by its logistics. It is concluded that film is best for general information, motivation, orientation, and some kinds of teaching, and less satisfactory for messages that require detailed, long-term retention of specific facts or procedures. It is also stated that film should not be used without a group leader or teacher. (SK)

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DO YOU NEED A FILM?

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Presented at the Twenty-Second International Technical Communications Conference Society for Technical Communications, 15-17 May 1975, Anaheim, California.

ABSTRACT. The motion picture is a communication tool. It may do other things also, entertain, for example, but its foremost function is to convey information. The information film offers a host of unique advantages as a communication medium. Conversely, in terms of the total scope of communications, it has many serious disadvantages—too often overlooked or not recognized by film zealots.

COMMUNICATION MEDIUM

Communications—that's a buzzword that'll guarantee fifteen minutes on the latest esoteric learning theory, nuclear arms race, or whatever. But unfortunately, considering all that's been said, written, and shown about it, there is still a great paucity of clear, concise communications. And, I suspect, there is no improvement in sight. It's something we all talk about, but no one does anything about it.

In today's high-energy visual and audio environment, we constantly are inundated with a myriad of miscellaneous and multifaceted messages—all competing for our time, energy, and thought processes. The barrage never ceases from birth to death. Alvin Toffler puts it this way: The waves of coded information turn into violent breakers and come at a faster and faster clip, pounding at us, seeking entry, as it were, into our nervous system.[1]

This information comes in waves of the spoken word, the written word, the electronic word, and the photographic and graphic-art word in an infinity of variations and combinations. These are the obvious media, the ones over which we as communicators have direct and creative control. But consider also the host of other communication media which make up the bulk of the waves: a color, a signpost, an abstract painting, a whiff of perfume, a uniform, a waltz, a traffic signal, a bikini-clad beauty, ad infinitum, to include every sensation our five senses receive. And each sensation contributes to the barrage of communication symbols and messages our audiences receive every day—each with its own influence on their daily lives, their attitudes, their mores, and from which the id and psyche are molded. Some are concise, some are subtle; but every one demands attention to some degree. Each sensation must be assimilated, associated, evaluated, collated, and stored; each requires a decision to act (mentally or physically) or not, now or in the future.

People communicate by talking and listening, by writing and reading, by broadcasting and viewing. In its simplest form, then, communication is the transmission of information from A to B and receipt of this information by B. Ideally this is followed by an acknowledgment from B to A that the information has been received. These processes of transmitting, receiving, and acknowledging require considerable skill. Unfortunately, the primary trouble with communication is that most people don't think there is a problem at all![2]

There is a multitude of media which can carry the information. Each has its special advantage and disadvantage. Each is best suited to specific applications depending on what the message is (information), who is to get the message (audience), and where and when the audience is to receive it (environment). As professionals in the communication business, our task is to exercise judgment and expertise in selecting the medium best suited to the information, the audience, and the environment. We cannot afford to be parochially comfortable in our own niches. All the media possibilities must be explored, even combinations, which in some instances are highly effective methods of communication.

[1] Alvin Toffler. *Future Shock*. New York, Bantam Books, February 1972, p. 166.
[2] William R. Van Dersal. "How To Be a Better Communicator—And a Successful Nurse," *Nursing '74*, December 1974.

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FILM AS A COMMUNICATION MEDIUM

Film is an excellent medium to solve those communication problems which require strong animated visuals. It is not, however, a panacea for all communications problems, far from it. It has many pitfalls too often overlooked or not recognized by the uninitiated and the zealots. Unfortunately, its tinsel glamour seduces too many of us. Its popular social and corporate acceptance is not challenged. Film has become a buzzword for instant gratification and solution. This heterodoxy is evidenced by the proliferation of film in today's mass communication arena.

Most of *these* films, I am convinced, have at best only marginal communication value and reflect a near total apostasy of communication canons and a squandering of scarce resources. They typify the age-old conflict of "Want" versus "Need." And what is wanted, more often than not, is not what is needed. Too frequently, however, the "Want" wins on spurious rationale. It is just too easy to make the snap judgment that "I need a film."

When this kind of judgment is made, the essential preproduction communication analysis, necessary to determine if the problem really can be or is best solved by film, is relegated to limbo. And the film is sponsored and produced by the uninformed, the biased, and the parochial without in-depth preplanning, precise problem statement, audience analysis, and synthesis of the essential elements of information into the communication message. Distribution methods and screening environment are thought of little, if at all. Yet, careful consideration and successful resolution of all these analysis elements are the very hallmark and foundation of successful films.

ADVANTAGES OF FILM

Our job, as professionals in the communication analysis process, is to evaluate all film advantages and disadvantages individually and together as they apply to the specific information problem at hand. An unbiased and professional look at this evaluation will determine if a film truly is needed or not. That is, a film will tender, at a minimum, a satisfactory solution to the communication problem, with maximum economy of resources.

Multimedia

Film's most important advantage is that it is multimedia. Both sight and hearing are stimulated in concert. (Some contemporary theatrical films claim to offer olfactory and tactile sensations.)

Each photographic scene, unless distorted for some purpose, is a faithful reproduction of the images and movements of an event (real or pseudo). This is a powerful communication faculty–illustrated by the old understatement "A picture is worth more than ten thousand words." And it signifies the primacy of film as a visual medium.

Approximately 70% of the information received from films comes from the visuals; only 30% is received aurally.[3] Stimulation of these dual senses with the right mix of sight and sound can have a powerful synergistic effect on audience comprehension, assimilation, and retention. However, some studies have shown that certain types of film commentary may interfere with communication.[4]

There is no absolute answer for the "right mix" of sight and sound. From my experience, however, I've found that audiences assimilate visual information at a significantly faster rate than auditory information. Also, the more familiar the audience is with the visuals, the more there is a progressively nonlinear, almost exponential, increase in assimilation and understanding.

The auditory information must not introduce communication static (interference) to the primary or visual element of this multimedia information tool. To be effective, auditory information must complement the visual information. If it is commentary, it must explain or amplify what the audience cannot perceive from the visual development.[5] Karel Reisz of the British Film Academy put it this way when discussing the robbery sequence in Carol Reed's 1946 film *Odd Man Out*: "... The dialogue track ... does not anchor the visuals by conveying important information, but adds to the total effect on a contributory rather than a primary level."[6] If the auditory information is music, sound effects, or background prattle (or a combination of these), it must be unobtrusive to the degree that its presence is not noticed. These sound elements set moods, add the dimension of realism, and amplify the pacing established by the visuals. Interference is established quickly when these aural elements become preeminent (in volume or importance), or incongruous, or not germane.

The primary interference, however, usually emanates from the commentary in the form of an incessant harangue of drivel or in a melange of technical trivia that dulls the senses. Attempting to comprehend what is being said, some audiences will concentrate on the commentary to the exclusion of the visuals. Since there is no time for reflective thought, they will fall farther and farther behind. Eventually they'll give up by escaping mentally (or physically) to a more comfortable environment.

Mass Medium

Another major advantage of film is its ability to reach the masses, simultaneously or sequentially over a period of time. From a film's internegative a host of identical release prints can be struck–tangible *end products* which *precisely repeat* the message. Prints can be projected (transmitted if over television) over and over again in a myriad of locations, each time *transmitting* the same message to new audiences. (All may not *receive* the same message, however.)

[3] S. M. Shelton. "A Writer Is a Writer Is a Writer–But a Film Writer Should Be More," *Proceedings, 21st International Technical Communication Conference, 15-18 May 1974*, St. Louis. Society for Technical Communication, Washington, D.C., p. 38.

[4] Charles F. Hoban, Jr., and Edward B. Van Ormer. *Instructional Film Research (Rapid Mass Learning), 1918-1950*. Pennsylvania State College, State College, Pa., December 1950.

[5] Shelton, op. cit.

[6] Karel Reisz. *The Techniques of Film Editing*. New York, Visual Arts Books, 1953, p. 265.

Or, for repeat audiences, the message is reinforced. In terms of overall audience manipulation, this is a powerful factor. The total audience is limited only by the film's distribution. And the cost per screening per person usually is the most economical, over the long term, of all media for any given message.

Visually Oriented Audience

Today's film audiences are attuned to receiving visual information—especially in film and television format. As a result of 30 years of incessant bombardment by the mass media of film and (later) TV, audiences are by and large highly visually oriented. They are capable of comfortably receiving copious amounts of (visual) information. And they can receive it quickly. The upper limit of the rate of reception is as yet undetermined, but I suspect it is several orders of magnitude faster than we imagine.

Capitalizing on this audience capability, we can design films to be shorter, faster paced, and more cogent, all with major increases in audience reception and with overall economy of production resources.

Captive Audience

Once the house lights dim and the projector starts, our audience is a captive in the darkened screening room. They can look only at the screen to see what we want them to see. They can hear only what we want them to hear. They have no other sensation choices. We've established near total control of their sensory environment (physical control also, for that matter). The only options our audience has are to adapt to the environment and follow the film, or to mentally turn off, or to leave the room.

To a lesser degree, these factors are true for other screening environments, such as television, individual teaching machines, and desk-top super 8-mm cartridge projectors. All factors considered, however, the captive audience remains as one of film's most potent advantages.

Passive Audience

The film audience is passive—a concomitant factor of the captive-audience advantage. A member of the audience doesn't have to do anything. Physically he settles in his chair, relaxes, and generally is comfortable. This sets a favorable environment for the reception of information.

Mentally he doesn't have to do much either, at least during the screening—that is, if the film is well-produced. He follows along easily as the film designer[7] mentally leads him by the hand through every facet and nuance of information. He is not strained, he likes it, and he is receptive. Hopefully, sometime after the lights come on, his mental processes will function favorably to the film's message. This can happen within seconds—or several days later. Some particularly well-made films of the attitude-changing or motivation type can exert their influence for many years over some audiences. This is especially true of a well-designed film that causes the audience to become emotionally involved with it. They have empathy.

Empathy

Within our frame of reference, empathy is that close identification audiences have with a person, place, or event depicted in a film. This experience happens to all to some degree or another. It is almost inescapable by the captive and passive audience ensconced in their physical and psychological niches.

I've found that the more intense and enduring the empathy is, the higher the probabilities are that the audience will receive, process, and store the film's message (information), and take action if required. For example, in a training situation strong empathy causes significant increases in learning.[8]

As communicators (film designers) our task is to exploit this powerful advantage. Early in the preproduction phase, the film designer must conduct a comprehensive audience analysis. He needs to find out just *who* this audience is that he intends to influence, manipulate, motivate, or train. What are their motives (to be looking at his film)? What is their average education? Intelligence? Age? What are their interests? Mores? Attitudes? What is the screening environment? A host of other questions must also be asked. Each film is unique, requiring a distinct set of questions for a valid audience analysis.

From this analysis the film designer can plan and produce his film to fit the audience—not himself, which so often happens. Generally, I've found, the films which engender the strongest empathy are not patronizing or abstruse; they present just enough challenge to pique the interest. Admittedly, this is a fine line. But with careful evaluation, perception, and experience, the film designer usually will be successful.

Designer Selection

Designer selection is a phrase I've coined to denote the film designer's decision-making process in his synthesis of certain major film elements into a total communication package. Its overall advantage lies in the control the film designer has in *what* is shown to the audience, *how* it is shown, and *where* in the film it is shown. Designer selection can be thought of as the artistic and scientific blending of psychological and technical elements to achieve the level of communication needed to accomplish the film's goals.

- One elemental advantage of designer selection is that the film designer shows the audience *precisely* what he wants them to see and with the proper emphasis. The film designer has *total* image (and audio) control by his selection of scenes.

At a live stage play, the audience can choose by concentration and selective viewing what he sees—be it the

[7] Shelton, op. cit.

[8] S. M. Shelton. Unpublished master's thesis, "An Experimental Study To Determine the Effects of Comic Emphasis as a Means of Depicting Errors in Motion Pictures as a Help in Learning a Perceptual Motor Skill," University of Southern California, Los Angeles, June 1956.

entire scope of the stage or just the face of a speaking actor. In a film the audience can see only what is shown to him. Recognize that the audience has some selective viewing decisions in certain types of film scenes, a long shot for example, but this is severely limited in terms of the total viewing experience.

- *How* information is shown, in terms of scene types (LS, MS, CU, and ECU),* determines in large measure its relative importance. The more full-frame an action is (CU or ECU), the more emphasis it has. It is in these two scene types, and to some extent the MS, that the essential elements of information are most successfully transmitted. Additionally, two or three CUs or ECUs edited in sequence enhance significantly the importance of an action.

The technical techniques of how information is shown is another major factor influencing emphasis and importance. Some of these techniques are split screen, rack focus, multiple image, zoom, soft focus, perspective distortion, solarization, and color shifting. All, however, are image controlling devices that distort or enhance the visual perspective of the audience.

- The juxtaposition of information within a film influences greatly its relevance and importance. Juxtaposition defines *where* it is shown in terms of internal sequencing. For example, consider this fundamental sequence: LS, MS, MS, CU. All scenes depict related and sequential action (information). If the essential elements of information are contained *primarily* in the CU, the audience immediately should comprehend its relationship to the preceding ancillary information and ascertain its importance. This film element is akin closely to the sequencing of CUs mentioned earlier.

Also, scenes which are dissimilar, unrelated, or nonsequential can be joined into a pregnant relationship by juxtaposition and adroit screen direction manipulation. This technique is prevalent in historical documentaries composed of stock and newsreel footage.

Juxtaposition also can give scenes meaning which they inherently do not have.[9] Sergei Eisenstein noted, "... Two film pieces of any kind, placed together, inevitably combine into a new concept, a new quality, arising out of that juxtaposition."[10]

Another element which gives import to information is simply the amount of time it is on the screen. Generally, the longer the screen time an action has (up to a saturation point), the greater its importance.

- In summary, the result of designer selection is the physical and psychological compelling of the audience to receive the film's message completely and correctly.

Remote Locations

Film can take the audience to remote locations—on the earth's surface, under the oceans, and out in space. This advantage is not limited to geographical locations. It encompasses the total spectrum from micro- to astro-photography—from molecular structure to distant galaxies.

Within the frame of reference of this paper, this advantage also applies to all specialized and nonvisible-light types of photography, such as infrared, ultraviolet, X-ray, microwave, radar, and camouflage-detection. These kinds of photography have expanded the scope of our vision to as yet unbounded dimensions. We now see what the eye could never see before.

Time Manipulation

Through various film techniques, time can be compressed or expanded. Time manipulation is used for detail study of fast-happening sequential events, for scientific analysis, for understanding of natural phenomena, or simply for artistic purposes. Time-lapse photography compresses into a few seconds the hours or days some events take to complete—clouds building or flowers blooming, for example. Conversely, high-speed photography expands near-instantaneous events into seconds and minutes—an explosion or a staged automobile crash, for example.[11]

Time can be manipulated by simple editing. For example, depending on technique, inserting a CU or a cutaway scene or scenes into a master scene can either expand time or compress it.

Also, time can be distorted (or rectified) in optical printing. This occurs when the length of an original scene is shortened by skip-frame printing or lengthened by multiframe printing.

Abstract Visualization

Film is an excellent medium to visualize abstract ideas. However, this presents a severe challenge to the film designer, but it also is one of the best uses of film as a communication tool. Through a short animation sequence, for example, the economic concept of gold in international finance could be made understandable to tenth graders.

Film can visualize also that which is inaccessible by reason of location, size, or nonavailability. It can explore the inner workings of the human circulatory system, or it can look inside a vacuum tube to scrutinize the electron flow.

Tailor-Made

Every film is unique. Each is designed especially to resolve a particular communication problem. (A few films have multipurpose applications.) The precision communication thrust of the film can be concentrated on the essence of the problem. If the film is designed and produced with care, therefore, the probability is high that the tailor-made film will be successful.

* Film production parlance for Long Shot, Medium Shot, Close Up, and Extreme Close Up, respectively.

[9] Reisz, op. cit., p. 30.

[10] Sergei Eisenstein. *The Film Sense*. New York, Meridian Books, 1957, p. 4.

[11] Edgar Dale. *Audio Visual Methods In Teaching–Revised Edition*. New York, Henry Holt and Company, Inc., 1959.

Silver Screen Magic

All factors considered, I've found audiences generally tend to be receptive to messages contained in films. This acceptance stems from some "silver screen magic," which I've not been able to identify clearly. In some measure this is attributable to a glamour conjured by film audiences. It comes from an arcane inherent authority that is attendant on all well-produced films. And, simply, it springs from the fact that if a film was made at all, "it must be important."

DISADVANTAGES OF FILM

In film as in physics, for every action there is a reaction—not necessarily equal or opposite, however. The preponderance of "advantages" must not cloud the film designer's reasoning in his preproduction communication analysis. He also needs to examine the specific communication problem at hand in light of the numerous disadvantages film has. The final decision, if film is or is not a valid and economical solution ("Need"), results from a trenchant analysis of all pro and con factors.

Continuous Format

One major disadvantage of film in its traditional format is that it must be seen continuously from start to finish. The audience has *no time* for reflective thought, for review of difficult sequences, for detailed scrutiny of complex visuals, and for discussion. This reduces significantly the overall communication effectiveness of film. Too much information is lost and cannot be retrieved. Multiple screenings alleviate the problem only marginally—if they can be arranged at all.[12] However, too many film screenings can cause a reduction in learning as well as negative attitudes.[13]

Much improvement has been made with the use of new film formats and screening techniques that permit, for example, stopping and reversing the film.

The disadvantage of continuousness, and others discussed below, augur well for short films (five to seven minutes) with pinpoint communication thrust. I've found this type of film to be more effective than traditional ones, and it is a more efficient use of design and production resources.

Transitory Nature

Perhaps film's greatest disadvantage, when compared with the written word, is that it is transitory. After the screening, the audience has *no residual material* for perusal or for review next month. If they didn't get the message or most of it the first time, they are out of luck. The odds are that they'll not have another chance to see the film.

Except in a very few instances, this fleeting nature of films negates to a large degree most long-term retention of information. Usually, only a few impressive highlights are remembered after a few months. Detailed information is lost so quickly that, if it is not reinforced in some other way, the printed word, for example, it has only marginal validity for inclusion in a film. Specifically for example, I'm referring to depicting a complex, sequential motor skill operation, or listing of exact numbers or items, or showing a complex drawing of any kind.

Linear Structure

As it is structured currently, film can unfold its message only linearly. That is, because film inherently is a time-based product, its information must be developed sequentially. And, perhaps more importantly, it must be seen sequentially. There is *no method* for the audience to skim, to concentrate, or to peruse at random. Linearity also poses serious problems for those who do not have the need, time, or inclination to see the whole thing—at least to see it the way the film designer shows it from his viewpoint.

Alien Perspective

In terms of information content, development, and pace, the film presents a perspective formed by the subjective judgments of the film designer—that is, a new or alien perspective for the audience. Film by its nature is a compendium of germane information the film designer has determined is necessary to solve the communication problem and has structured and paced. These elements define the film's informational common denominator. Because film is a mass medium, all who see it are exposed, for better or for worse, to the same interpretation of the information.

There is *no opportunity* for the audience to ferret out the essence of information or to evaluate, within their frames of reference, the truth, relevance, import, propriety, and perspective of each element of information. Also, other problems are caused for those who can not or do not want to follow the development set by the film designer as to what is seen, how it is seen, and where (in the film) it is seen. For others, the pace of the film may not be to their liking—either too fast or too slow for their individual comprehension rates.

Inflexibility

Films become obsolete quickly, especially those treating topical subjects. Any significant updating or revising of a film is almost impossible because it is an inflexible composite in which no element can be changed without changing all others. Only a simple scissoring of unwanted scenes and their accompanying sound track of a release print is possible. Any revision more than this requires a major expenditure in personnel, money, and time. This largely causes the proliferation of obsolete films which remain in circulation. It's just too expensive to change them.

[12] Chester L. McTavish. "Effects of Repetitive Film Presentations on Learning," in *Abstract of Doctoral Dissertation, the Pennsylvania State College, Vol. 16*. State College, Pa., 1954.

[13] J. C. Reid and D. W. MacLennan. *Research in Instructional Television and Film*. Office of Education, U.S. Department of Health, Education, and Welfare, Superintendent of Documents Catalogue Number FS5.234:34041. U.S. Government Printing Office, Washington, D.C., 1967, p. 10.

Logistics

Film is worthless without the integral parts necessary to hold a screening. And the logistics of putting these parts together successfully are deceptively complex—posing a challenge of major proportions. The film, equipment, projectionist, group (audience), and group leader all are required to assemble in near perfect "harmony" at the same time and at the same place. If they do not, a negative attitude can be generated, which seriously impedes audience reception. Additionally, the audience should be motivated that it's to their advantage to see the film here and now. One research study found the nearer the goal for using the film's information, the greater the learning (communication.)[14]

- The equipment, composed of a sound projector with attendant amplifier, speaker, takeup reel, and screen, is heavy, expensive, in constant need of cleaning and preventative maintenance, and prone to breakdown. Additionally, the projectionist needs specialized training and mechanical skills.
- The screening room should be designed especially for light and acoustic control, should be insulated from outside noise, and should provide enough comfort that the audience is not distracted. The complete setting should be conducive to audience reception of the film's message.
- Under all but ideal conditions, release prints deteriorate rapidly. Scratches, torn sprocket holes, missing sections, dirt (especially on the sound track), and incorrect threading all contribute to the deterioration and to negative attitudes.

Helping to solve logistics problems are new film formats and projection devices; for example, super 8-mm magnetic sound, Mylar film base, cartridge-loaded prints, desk-top and briefcase projectors, daylight screens, and individual teaching machines.

Cost

Films are expensive. Considering all communication tools, it probably is the most expensive in terms of cost per item. However, over the long term I suspect that it is the least expensive in cost per person per screening.

Of all the disadvantages, cost is the one that needs the most careful evaluation. It must be determined clearly that the expected accrual of information by the prospective audience is worth the resource expenditure necessary to produce the film.

Lead Time

It takes a relatively long lead time to produce a film and to get the release prints distributed. Of all communication tools, I suspect that film requires the longest lead time. If there are no compelling other justifications, this disadvantage alone seriously erodes the justification to produce films dealing with fast-developing topical subjects.

No Room for Error

Film by its inherent authority commands attention and, I believe, respect. Therefore, one absolute guarantee of failure in a film is to be dishonest or inaccurate in any way. Today's audiences are too sophisticated to be deceived. The film's *total* credibility is lost quickly if *any* misstatement of fact or deceptive visual distortion is detected.

Within my experience, I've found that one way to have a visual distortion accepted is to tell the audience unabashedly that the scene is a fake, for whatever reason; for example, "We're using a model now (instead of a real airplane) because it is easier to control in this demonstration of approach procedures." In this circumstance, the audience usually will extend their empathy and, by being more receptive, join the film designer in his efforts to communicate.

CONCLUSION

Film is an excellent communication medium for some types of messages; for example, general information, sales, motivation, orientation, and some kinds of teaching. It is not effective usually for messages that require detailed, long-term retention of specific facts or procedures. And generally it should not be produced to be used by itself. That is, it should be used with a group leader, teacher, or proctor.

Oftentimes, I've found there is no one "best" communication medium. Optimum communication (maximum influence over the short and long terms) is achieved best by use of an audio-visual medium, backed up by the printed word, illustrated, preferably.

[14] Malcolm McNiven. *Effects on Learning of the Perceived Usefulness of the Material To Be Learned*. Technical Report SDC269-7-54, U.S. Naval Training Devices Center, Port Washington, Long Island, N.Y., 1955.